

### ABSTRACT

Techniques are disclosed for enabling a single computer system to execute both operating systems that permit multiple devices to be mapped to a single PCI function and operating systems that do not permit such mapping. Prior to loading and executing an operating system (e.g., during system reset), the computer system determines whether the operating system supports mapping of multiple devices to a single function. If such mapping is supported, the computer system maps multiple devices on a single PCI card to a single function in the PCI configuration space for the card. If such mapping is not supported, the computer system maps each device to a separate PCI function. The computer system then loads and executes the operating system. The operating system is thereby enabled to access all devices on the bus according to the particular device-function mapping scheme supported by the operating system.